

Claims

1-27. (Cancelled)

28. (Previously presented) A process for melting materials having hazardous and/or contaminated substances, comprising:

placing materials including the hazardous and/or contaminated substances into a container that can withstand temperatures of up to 2000 degrees C without significant degradation of the container wherein the container has a cavity and includes a slip form positioned in the cavity;

heating the materials in the container to a molten state;

vitrifying the molten materials without removing molten materials from the container to form a vitrified product in the container that contains at least a portion of the hazardous and/or contaminated substances immobilized therein; and

discarding the container with the vitrified product therein or removing the vitrified product from the container.

29. (Previously presented) The process of claim 28 further including the step of placing sand in the container behind the slip form.

30. (Previously presented) The process of claim 29 further including removing the slip form from the container and leaving the sand.

31. (Original) The process of claim 29 wherein the slip form is not removed from the container.

32. (Previously presented) The process of claim 29 wherein the container has a plurality of walls and an opening is defined between the plurality of walls and the slip form.

33. (Original) The process of claim 32 that further includes the step of placing sand in the opening.

34. (Previously presented) The process of claim 29 wherein the container has a plurality of walls and a bottom and a first opening is defined between the plurality of walls and the slip form and a second opening is formed between the bottom and the slip form.

35. (Original) The process of claim 34 that further includes the step of placing sand in both the first opening and the second opening.

36-42. (Cancelled)

43. (Previously presented) A process for melting materials to be treated, the process comprising:

placing hazardous and/or contaminated and/or waste materials to be treated into a container, wherein the container does not comprise a region formed in the ground;

covering the material with soil prior to heating;

heating the hazardous and/or contaminated and/or waste materials to be treated in the container until the materials to be treated melt to create melted hazardous and/or contaminated and/or waste materials; and

allowing the melted hazardous and/or contaminated and/or waste materials to cool in the container to create a vitrified hazardous and/or contaminated and/or waste material.

44-70. (Cancelled)